

**EXAMINER'S AMENDMENT**

The After-Final amendment filed on 10/20/08 was entered.

Amended claims 1-2 are pending in the present application.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Todd Armstrong on 11/18/08-11/20/08.

***In the Claims:***

Amended claims 1-2 were cancelled, and they were replaced by the following new claim:

**Claim 22 (New)** A method for treating a cardiac muscle disease in a human patient in need of treatment for cardiac muscle disease, said method comprising administering to said patient isolated human unrestricted somatic stem cells (USSCs) from umbilical cord blood, wherein said USSCs are negative for the CD14 and CD45 antigens and positive for the CD13, CD29, CD44 and CD49e antigens, and wherein said USSCs express fibulin-2 and lack expression of hyaluronan synthase and fibromodulin, whereby said USSCs regenerate cardiac muscle cells in the heart of said patient and thereby treating said disease.

***REASONS FOR ALLOWANCE:***

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or fairly suggest a method for treating a cardiac muscle disease in a human patient using isolated human unrestricted somatic stem cells (USSCs) from umbilical cord blood, that have the recited characteristics as claimed. Kern et al. (Stem Cells 24:1294-1301, 2006; Cited by Applicant) disclosed that human mesenchymal stem cells from umbilical cord blood (UCB-MSCs) express CD106 (Table 2). Additionally UCB-MSCs do not have adipogenic differentiation capacity in contrast to mesenchymal stem cells from bone marrow and adipose tissue (see at least the abstract) and USSCs of the present invention. Therefore, UCB-MSCs are clearly distinct and have different properties from USSCs isolated by the present application and in the post-filing art of Kogler et al. (J. Exp. Med. 200:123-135, 2004; Cited by Applicant). Accordingly, the claim is allowable over the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang Nguyen, Ph.D., whose telephone number is (571) 272-0776.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Joseph T. Woitach, Ph.D., may be reached at (571) 272-0739.

**To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1633; Central Fax No. (571) 273-8300.**

**Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.**

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/QUANG NGUYEN/  
Primary Examiner, Art Unit 1633